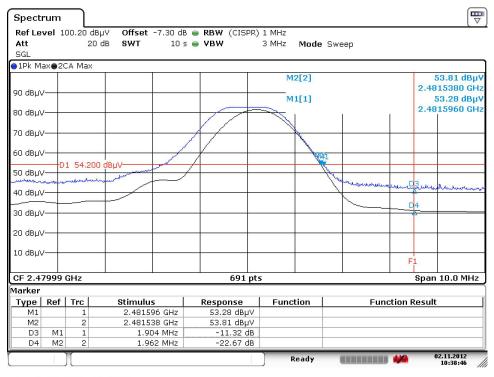


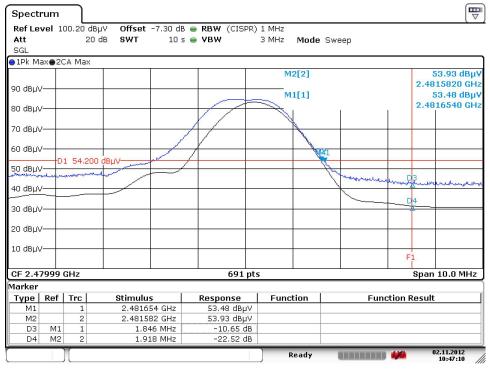
DNB Job Nu	mber:	36045			Date:	2 Nov 20	012		formance
Customer:		Icon Health	Health and Fitness, Inc.						
Model Numb	er:	ISRR12	FCC Par						
Description:		Transceiver	nsceiver for use with Icon products						Clause
		1Mbps data	rate (Basic dat	15.247(d)					.247(d)
Ambient Temperature Relative Humidity Baron							Barom	metric Pressure	
	19 °C			28 % 101.8 kPa					
EUT perform	ned within th	ne requiremen	nts of the applic	cable sta	andard [X	Yes [] No	Le.	s Payne	
Radiated	Corrected B	and Edge Me	easurement - Si	ingle Ch	annel - Ver	t - X Axis	F	req	
Limit	Lower (MHz)	Upper (MHz			Measured dBuV/m)	Delta (dBuV)	D	elta IHz)	Pass/Fail
2483.500		2481.59	96 54.0		42.68	-11.32	-1.	904	Pass





Band Edge Measurements

					0				
DNB Job Nu	mber:	36045		Date:	2 Nov 2		nformance		
Customer:]	con Health a	nd Fitness, Inc.	, Inc. Standard					
Model Numb	er:	ISRR12	FCC Part 15						
Description:	F	Гransceiver f	ransceiver for use with Icon products Clause						
	-	l Mbps data r	ate (Basic data rat	15.247(d)					
Ambient Temperature Relative Humidity Baro							metric Pressure		
	19 °C		28	%		101.8 kPa	a		
EUT perform	ned within the	requirement	s of the applicable	e standard [X	X] Yes [] No	Les Payne			
Radiated	Corrected Ba	Band Edge Measurement - Single Channel - Vert - Y Axis Freq							
Limit	Lower (MHz)	Upper (MHz)	Limit (dBuV/m)	Measured (dBuV/m)	Delta (dBuV)	Delta (MHz)	Pass/Fail		
2483.500		2481.654	54.0	43.35	-10.65	-1.846	Pass		

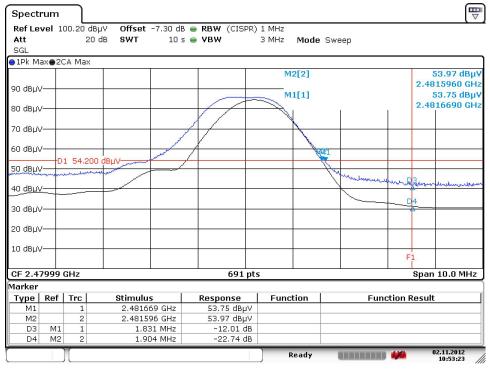


Date: 2.NOV.2012 10:47:10



Band Edge Measurements

DNB Job Nu	mber:	36045			Date:	2 Nov 2	2012		formance
Customer:]	Icon Health	and Fitness,	Standard Standard					
Model Numb	er:	ISRR12	FCC Part 15						
Description:	,	Transceiver	ransceiver for use with Icon products Clause						
		1 Mbps data	rate (Basic d	lata rate	15.247(d)				
Ambient Temperature Relative Humidity Baro.							Barome	ometric Pressure	
	19 °C	28 %			%		10	1.8 kPa	
EUT perform	ned within the	requiremen	ts of the app	licable	standard [X	Yes [] No	Les	Payne	
Radiated	Corrected Ba	Band Edge Measurement - Single Channel - Vert - Z Axis Freq							
Limit	Lower (MHz)	Upper (MHz)			Measured (dBuV/m)	Delta (dBuV)	De (Mi	lta	Pass/Fail
2483.500		2481.66	9 54.	.0	41.99	-12.01	-1.8	331	Pass

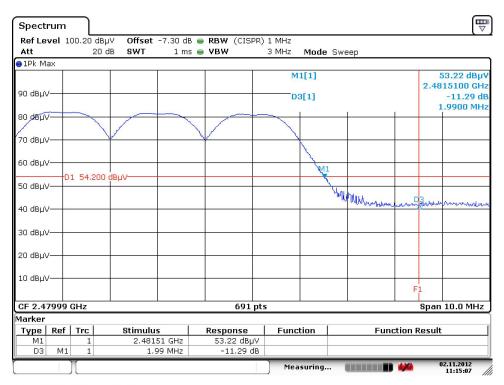


Date: 2.NOV.2012 10:53:22



Band Edge Measurements

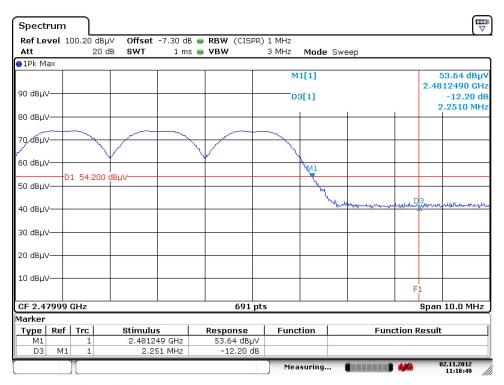
						0				
DNB Job Nu	mber:	36045			Date:	2 Nov	2012		formance	
Customer:]	Icon Health	and Fitn	ness, Inc.	nc. Standard					
Model Numb	er:	ISRR12	FCC Part 15							
Description:	,	Transceiver	ransceiver for use with Icon products Clause							
		1Mbps data	rate (Ba	sic data rat	15.247(d)					
Ambient Temperature Relative Humidity Baron							Baron	metric Pressure		
	19 °C	28 %			%		1	01.8 kPa		
EUT perform	ned within the	requiremen	ts of the	applicable	standard [X	X] Yes [] N	o Le	es Payne		
Radiated	Corrected Ba	and Edge Me	Edge Measurement - All Channels - Horz - X Axis Freq							
Limit	Lower (MHz)	Upper (MHz)		Limit dBuV/m)	Measured (dBuV/m)	Delta (dBuV)	Γ	Delta MHz)	Pass/Fail	
2483.500		2481.51	0	54.0	42.71	-11.29	-1	.990	Pass	



Date: 2.NOV.2012 11:15:07

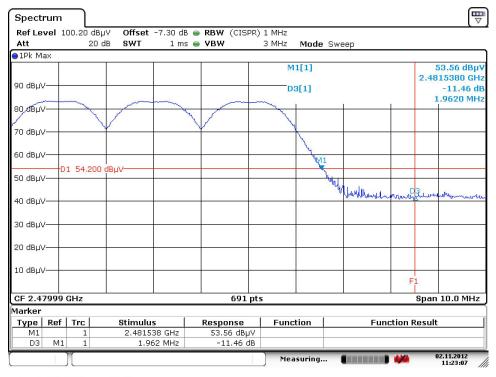


					_					
DNB Job Nu	mber:	36045			Date:	2 Nov 2	2012		formance	
Customer:]	Icon Health	and F	itness, Inc.	Standard Standard					
Model Numb	er:	ISRR12	FCC Part 15							
Description:	,	Transceiver	ransceiver for use with Icon products Clause							
		l Mbps data	rate (l	Basic data rat	ate) 15.247(d)					
Ambient Temperature Relative Humidity Baron							Barom	metric Pressure		
	19 °C	28 %			%		10	01.8 kPa	ı	
EUT perform	ned within the	requiremen	ts of t	the applicable	standard [X	[] Yes [] No) Le	s Payne		
Radiated	Corrected Ba	Band Edge Measurement - All Channels - Horz - Y Axis Freq								
Limit	Lower (MHz)	Upper (MHz)		Limit (dBuV/m)	Measured (dBuV/m)	Delta (dBuV)	elta De		Pass/Fail	
2483.500		2481.24	9	54.0	41.80	-12.20	-2	.251	Pass	





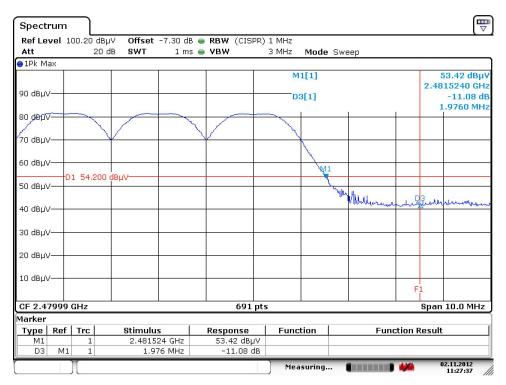
							,			
DNB Job Nu	mber:	36045			Date:	2 No	ov 2012		formance	
Customer:		Icon Health	and F	itness, Inc.		Standard				
Model Numb	er:	ISRR12	FCC Part 15							
Description:		Transceiver	ransceiver for use with Icon products Clause							
		1Mbps data	rate (I	(Basic data rate) 15.247(d)						
Ambient Temperature Relative Humidity Baron							metric Pressure			
	19 °C	28 %			%		1	01.8 kPa	ı	
EUT perform	ned within th	e requiremen	nts of t	the applicable	standard [X	Yes []	No Le	es Payne		
Radiated	Corrected E	Band Edge Measurement - All Channels - Horz - Z Axis Freq								
Limit	Lower (MHz)	Upper (MHz		Limit (dBuV/m)	Measured (dBuV/m)	Delta (dBuV)	T		Pass/Fail	
2483.500		2481.53	38	54.0	42.54	-11.46	-1	.962	Pass	





Band Edge Measurements

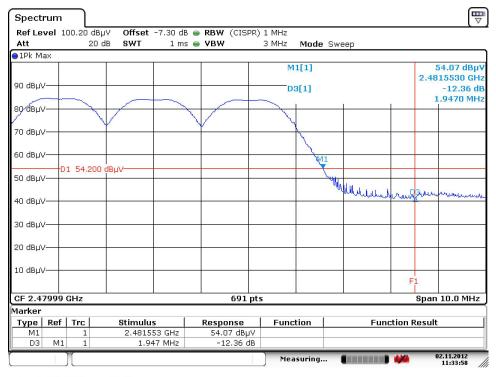
DNB Job Nu	mber:	36045			Date:	2	2 Nov 20)12		formance
Customer:		Icon Health	and l	Fitness, Inc.		Standard				
Model Numb	er:	ISRR12	FCC Part 15							C Part 15
Description:		Transceiver	ransceiver for use with Icon products Clause							
		1Mbps data	rate	(Basic data rat	15.247(d)					5.247(d)
Ambient Temperature Relative Humidity Baromet							netric Pressure			
	19 °C	28 %			%			10	1.8 kPa	
EUT perform	ned within th	e requireme	nts of	the applicable	standard [X	[] Yes	[] No	Les	Payne	
Radiated	Corrected I	Band Edge Measurement - All Channels - Vert - X Axis Freq								
Limit	Lower (MHz)	Upper (MHz		Limit (dBuV/m)	Measured (dBuV/m)		Delta		elta Hz)	Pass/Fail
2483.500		2481.52	24	54.0	42.92	-11	.08	-1.9	976	Pass



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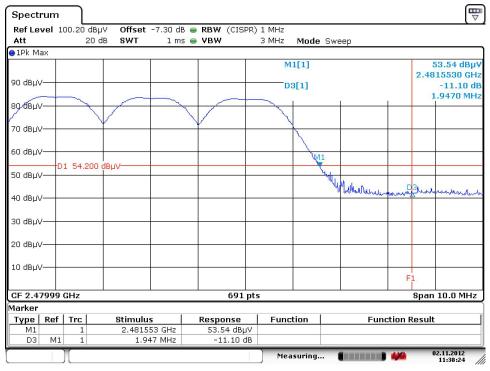


					8					
DNB Job Nu	mber: 3	36045		Date:	2 Nov 2		nformance			
Customer:	I	con Health	and Fitness, Inc.			Standard				
Model Numb	er: I	SRR12	FCC Part 15							
Description:	7	Transceiver	ansceiver for use with Icon products Clause							
	1	Mbps data	rate (Basic data ra	te)		15.247(d)				
Ambie	Barometric Pı	metric Pressure								
	19 °C		28 %			101.8 kP	P a			
EUT perform	ned within the	requiremen	ts of the applicable	e standard [X	X] Yes [] No	Les Payne	?			
Radiated	Corrected Ba	and Edge Me	easurement - All C	Channels - Vert	- Y Axis	Freq				
Limit	Lower (MHz)	Upper (MHz)		Measured (dBuV/m)	Delta (dBuV)	Delta (MHz)	Pass/Fail			
2483.500		2481.55	54.0	41.64	-12.36	-1.947	Pass			





					\boldsymbol{c}					
DNB Job Nu	mber:	36045		Date:	2 Nov 2	2012 C	onformance			
Customer:		Icon Health	and Fitness, Inc.		Standard					
Model Numb	er:	ISRR12	FCC Part 15							
Description:		Transceiver	Cransceiver for use with Icon products Clause							
		1Mbps data	rate (Basic data ra	te)	15.247(d)					
Ambie	Barometric I	metric Pressure								
	19 °C		28	3 %		101.8 k	Pa			
EUT perform	ned within th	e requiremen	its of the applicabl	e standard [X	X] Yes [] No	Les Payi	ıe			
Radiated	l Corrected I	Band Edge Measurement - All Channels - Vert - Z Axis Freq								
Limit	Lower (MHz)	Upper (MHz)		Measured (dBuV/m)	Delta (dBuV)	Delta (MHz)	Pass/Fail			
2483.500		2481.55	54.0	42.90	-11.10	-1.947	Pass			





Conducted Spurious

DNB Job Number:	36045		Date:	5 Nov 2012	Conformance	
Customer:	Icon Health	and Fitness, Inc.		Standard		
Model Number:	ISRR12	FCC Part				
Description:	Transceiver	ansceiver for use with Icon products Clause				
	Test Proced	Procedure 15.247(c)				
Ambient Temper	ature	Relative Hur	nidity	Baron	netric Pressure	
21 °C 25 % 101.2 kPa						
EUT performed within t	EUT performed within the requirements of the applicable standard [X] Yes [] No Les Payne					

Test Procedure: IEEE C63.10

Spurious RF Conducted Emissions

Use the following spectrum analyzer settings:

Span = wide enough to capture the peak level of the in-band emission and all spurious emissions (e.g., harmonics) from the lowest frequency generated in the EUT up through the 10th harmonic. Typically, several plots are required to cover this entire span.

RBW = 100 kHz

VBW RBW

Sweep = auto

Detector function = peak

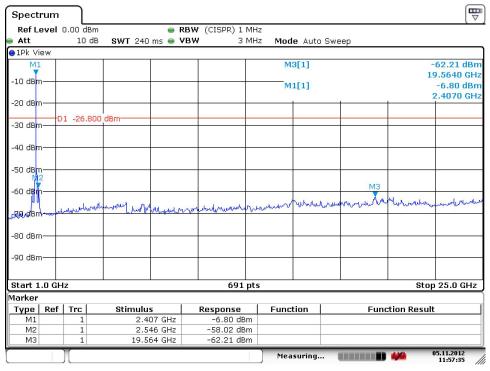
Trace = max hold

Allow the trace to stabilize. Set the marker on the peak of any spurious emission recorded. The level displayed must comply with the limit specified in this Section. Submit these plots.



Conducted Spurious

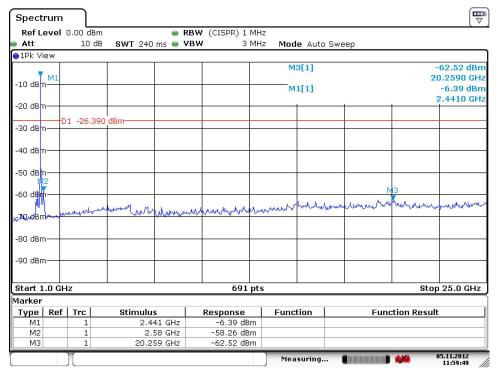
DNB Job Number:	36045		Date:	5 Nov 2	2012	Conformance	
Customer:	Icon Health	and Fitness, Inc.				Standard	
Model Number:	ISRR12			FCC Part 15			
Description:	Transceiver	for use with Icon p		Clause			
	1Mbps data	os data rate (Basic data rate) - Low Channel					
Ambient Temper	ature Relative Humidity Baron				Baron	netric Pressure	
21 °C		25	%		101.2 kPa		
EUT performed within t	he requireme	nts of the applicable) Le	es Payne			
Peak Output Power	Reading		-20dBc		Pass/Fall		
-6.64 dBm	-	-6.80 dBm	-26.80 dBm		Pass		





Conducted Spurious

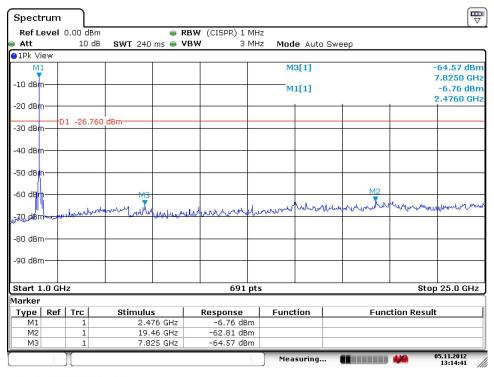
DNB Job Number:	36045		Date:	5 Nov 2	012	Conformance	
Customer:	Icon Health	and Fitness, Inc.				Standard	
Model Number:	ISRR12			FCC Part 15			
Description:	Transceiver	for use with Icon pr		Clause			
	1Mbps data	Ibps data rate (Basic data rate) - Mid Channel					
Ambient Tempera	ature	Relative I	Humidity	I	Baron	netric Pressure	
21 °C		25	%		101.2 kPa		
EUT performed within the	he requireme	nts of the applicable	Le	es Payne			
Peak Output Power	Reading		-20dBc			Pass/Fall	
-6.35 dBm	-	-6.39 dBm	-26.39 dBm		Pass		





Conducted Spurious

DNB Job Number:	36045		Date:	5 Nov 2	2012	Conformance	
Customer:	Icon Health	and Fitness, Inc.		Standard			
Model Number:	ISRR12					FCC Part 15	
Description:	Transceive	for use with Icon p		Clause			
	1Mbps data	rate (Basic data rat	15.247(c)				
Ambient Temperature Relative Humidity Baron				Baron	metric Pressure		
21 °C		25 %			01.2 kPa		
EUT performed within the requirements of the applicable standard [X] Yes [] No Les Payne						es Payne	
Peak Output Power Reading		Reading	-20dBc			Pass/Fall	
-6.39 dBm -6.76 dBm		-6.76 dBm	-26.76 dBm			Pass	



15.247(d): Power spectral density(PSD).

Test Procedure: IEEE C63.10

The same method of determining the conducted output power shall be used to determine the power spectral density.

If a peak output power is measured, then a peak power spectral density measurement is required. If an average output power is measured, then an average power spectral density measurement should be used.

Locate and zoom in on emission peak(s) within the passband. Set RBW = 3 kHz, VBW > RBW, sweep= (SPAN/3 kHz) e.g., for a span of 1.5 MHz, the sweep should be $1.5 \times 106 \times 3 \times 103 = 500$ seconds.

The peak level measured must be no greater than + 8 dBm. If external attenuation is used, don't forget to add this value to the reading. Use the following guidelines for modifying the power spectral density measurement procedure when necessary.

For devices with spectrum line spacing greater than 3 kHz no change is required.

For devices with spectrum line spacing equal to or less than 3 kHz, the resolution bandwidth must be reduced below 3kHz until the individual lines in the spectrum are resolved. The measurement data must then be normalized to 3 kHz by summing the power of all the individual spectral lines within a 3kHz band (in linear power units) to determine compliance.

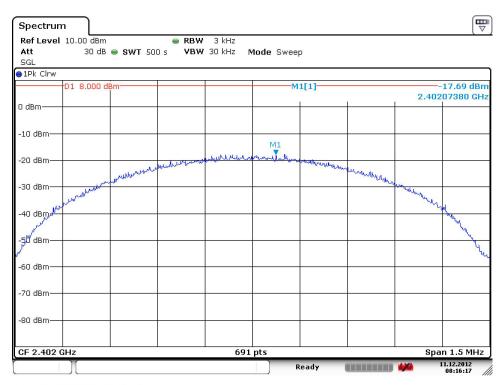
If the spectrum line spacing cannot be resolved on the available spectrum analyzer, the noise density function on most modern conventional spectrum analyzers will directly measure the noise power density normalized to a 1 Hz noise power bandwidth. Add 35dB for correction to 3 kHz.

Should all the above fail or any controversy develop regarding accuracy of measurement, the Laboratory will use the HP 89440A Vector Signal Analyzer for final measurement unless a clear showing can be made for a further alternate.



Power Spectral Density

				or spectrum -			
DNB Job Number	:: 36045		Date:	11 Dec 2012	Conformance		
Customer:	Icon Health	and Fitness, Inc.		Standard			
Model Number:	ISRR12			FCC Part 15			
Description:	Transceiver	for use with Icon p		Clause			
	1Mbps data	rate (Basic data rat		15.247(d)			
Environmental Conditions							
Ambient T	emperature	Relative 1	Relative Humidity Barom				
19	°C	28	%	101.8 kPa			
EUT performed w	EUT performed within the requirements of the applicable standard [X] Yes [] No Les Payne						
Channel	Freq MHz	Meas PSD (dBm)	Limit (dBm)	Delta (dBm)	Pass/Fail		
Low	2402	-17.69	8.0	-25.69	Pass		





Power Spectral Density

				1			
DNB Job Number	:: 36045		Date:	11 Dec 2012	Conformance		
Customer:	Icon Health	and Fitness, Inc.		Standard			
Model Number:	ISRR12			FCC Part 15			
Description:	Transceiver	for use with Icon p		Clause			
	1Mbps data	rate (Basic data rat		15.247(d)			
		Environment	al Conditions				
Ambient T	emperature	Relative Humidity Ba			rometric Pressure		
19	°C	28	%	101.	101.8 kPa		
EUT performed w	EUT performed within the requirements of the applicable standard [X] Yes [] No Les Payne						
Channel	Freq MHz	Meas PSD (dBm)	Limit (dBm)	Delta (dBm)	Pass/Fail		
Middle	2440	-18.24	8.0	-26.24	Pass		

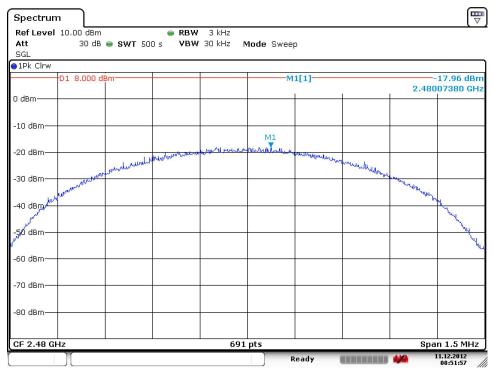


Date: 11.DEC.2012 08:27:41



Power Spectral Density

DNB Job Number	: 36045		Date:	11 Dec 2012	Conformance	
Customer:	Icon Health	and Fitness, Inc.		Standard		
Model Number:	ISRR12			FCC Part 15		
Description:	Transceiver	for use with Icon p		Clause		
	1Mbps data	rate (Basic data rat		15.247(d)		
Environmental Conditions						
Ambient T	emperature	Relative 1	Humidity	Barome	metric Pressure	
19	°C	28	%	101.8 kPa		
EUT performed within the requirements of the applicable standard [X] Yes [] No Les Payne						
Channel	Freq MHz	Meas PSD (dBm)	Limit (dBm)	Delta (dBm)	Pass/Fail	
High	2480	-17.96	8.0	-25.96	Pass	



2.1055 Frequency stability.

Test Procedure: IEEE C63.10

The frequency stability shall be measured with variation of ambient temperature from -30 to +50 degrees centigrade and the voltage shall be measured at 85% and 115% of the nominal voltage.

Use the following spectrum analyzer settings:

Span = 5MHz RBW = 100 kHz VBW RBW Sweep = auto Detector function = peak Trace = max hold

Allow the trace to stabilize. Set marker M1 On the peak of the channel, set marker M2 on the -30dB down point of the leading edge of the channel, set marker M3 on the -30dB down point of the trailing edge of the channel. Record this data in the appropriate table.

Verify that the lower channel does not exceed below the lower band edge and the upper channel does not exceed the upper band edge.

Temperature Stability:

Frequency measurements shall be made at the extremes of the specified temperature range and at intervals of not more than 10 centigrade through the range. A period of time sufficient to stabilize all of the components of the oscillator circuit at each temperature level shall be allowed prior to frequency measurement. Only the extreme temperature range data shall be recorded in the table unless significant variations occur during the measurements.

Voltage Stability:

Vary primary supply voltage from 85 to 115 percent of the nominal value or values in the case of a nominal voltage range.



Measurement Test Set Up

				-
DNB Job Number:	36045	Date:	5 Nov 2012	Conformance
Customer:	Icon Health and Fitness, Inc.			Standard
Model Number:	ISRR12			FCC Part 15
Description:	Transceiver for use with Icon pro-	ducts		Clause 15.247
				13.247
	Frequency Stability Me	easurement	t Set Up	





Frequency Stability

			` /		1 requeitey Stability				inity
DNB Job Number: 36045					Date:	5 Nov	2012		nformance tandard
Customer:		Icon Health	and Fitness, Inc	: .					
Model Num	Model Number: ISRR12							FCC Part 15	
Transceiver for use with Icon products						Clause			
Description:		1Mbps data	rate (Basic data	rate)				2.1055	
			Environm	ental Conditi	ons				
Amb	ient Tempe	rature	Relati	ve Humidity			Baron	netric Pr	essure
	21 °C			25 %			1	101.2 kPa	
EUT perform	ned within	the requiremen	ts of the applica	able standard	[X] Ye	s []N	lo Le	es Payne	?
			Frequency Stal	bility - Temperat	ure - Measu	red Freque	ncy Band	width	
TEST CONI	DITIONS	Lo Cl	Channel Mid Channel				Hi Channel		
Temperature	Voltage	Fl	Fh	Fl		Fh]	F1	Fh
-30.00 °C	3.3 Vdc	2.4008133	2.4032012	2.4388784	2.44	11795	2.478	38205	2.4811360
-20.00 °C	3.3 Vdc	2.4008133	2.4032012	2.4388857	2.44	11867	2.478	88061	2.4811143
-10.00 °C	3.3 Vdc	2.4008495	2.4032012	2.4388712	2.44	12012	2.478	38061	2.4811360
0.00 °C	3.3 Vdc	2.4008350	2.4032012	2.4388495	2.44	11939	2.478	38061	2.4811433
10.00 °C	3.3 Vdc	2.4008495	2.4031939	2.4388495	2.44	12012	2.478	37988	2.4811216
20.00 °C	3.3 Vdc	2.4008495	2.4031939	2.4388423	2.44	11939	2.478	37916	2.4811577
30.00 °C	3.3 Vdc	2.4008423	2.4031939	2.4388423	2.44	11939	2.478	37771	2.4811577
40.00 °C	3.3 Vdc	2.4008495	2.4031867	2.4388423	2.44	12012	2.478	37699	2.4811433
50.00 °C	3.3 Vdc	2.4008495	2.4031795	2.4388423	2.44	11795	2.478	37627	2.4811288
55.00 °C	3.3 Vdc	2.4008495	2.4031650	2.4388205	2.44	11202	2.478	87699	2.4811143

		Frequency Stability - Voltage - Measured Frequency Bandwidth							
TEST CONDITIONS		Lo Ch	Channel Mid Channel		Hi Channel				
Temperature	Voltage	Fl	Fh	Fl	Fl Fh		Fh		
25.00 °C	2.805 Vdc	2.4009074	2.4031722	2.4388712	2.4411795	2.4787916	2.4800433		
25.00 °C	3.3 00Vdc	2.4008857	2.4031867	2.4388784	2.4411939	2.4788061	2.4811288		
25.00 °C	3.795 Vdc	2.4008784	2.4031867	2.4388640	2.4411867	2.4787988	2.4811216		

Note 1: Shaded area represents nominal voltage and temperature range.

 $Note\ 2: \quad Fl = Lower\ channel\ frequency\ edge\ (-30dB\ down)\ /\ Fh = Upper\ channel\ frequency\ edge\ (-30dB\ down)$

2.1033 (b) (7) Equipment Photographs

Photo 1	Internal	Top of PCB
Photo 2	Internal	Bottom of PCB
Photo 3	External	Front
Photo 4	External	Rear









15.247 (b) (5) RF Exposure Requirements

RF Exposure – MPE Calculations (2400-2483.5 MHz Band)

Transmitter Power: 0.230 mW
Antenna Gain: 2.3 dB
Cable loss: 0 dB

Frequency range: 2400 - 2483.5 MHz

Assumptions

- 1. A single ¼ wavelength radiating antenna is assumed.
- 2. Closest exposure distance is assumed to be 0.5 cm.

Calculations

The following results shall be assumed to be accurate for the far-field only. These predictions will over-estimate power density in the near-field. Based on the use of a ¼ wavelength radiator, a distance of 0.5 cm is considered to be in the far-field for all cases.

 $S = PG/4*PI*R^2$ P is 0.23 mW G is 2.3 dB (Antenna gain – loss) or $10^{(2.3/10)}$ or 2.3

	R = (Distance in cm)							
	20cm	20cm 10cm 5cm 2cm 1cm 0.5cm						
S =	0.000077	0.000307	0.001230	0.007686	0.030742	0.122970	mW/cm ²	

For Occupational/Controlled Exposure

From 1,500 to 100,000 MHz, power density limit is 5 mW/cm² for 6 minutes

For General Population/Uncontrolled Exposure

From 1,500 to 100,000 MHz, power density limit is 1 mW/cm² for 30 minutes

In accordance with FCC requirements for a portable device the following observations are observed:

Maximum E.I.R.P. = 0.39mW

This device is a low power radiator and the RF field which it generates is very low and therefore exposure to the radiated field is minor. Therefore it can be considered to comply with the requirements of FCC and IC to RF exposure in accordance with KDB 447498 v04.

Conclusion: Device complies with FCC and IC RF Exposure requirements.

End of Report UT36045F-001